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User Manual

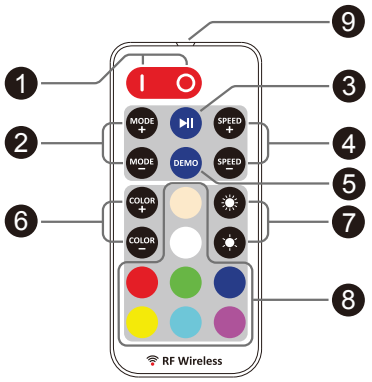
Part Number:

MCBRF-RGB10

Important: Read all instructions prior to installation.

RGB LED Controller with Wireless RF Remote

Model	RGB10
Dynamic Mode	43 Modes
Static Color	30 Colors
PWM Grade	256 Levels
Brightness Grade	5 Levels
Speed Grade	10 Levels
Overload Protection	Yes
Overheat Protection	Yes
Working Voltage	DC 5-24V
Remote Frequency	433.92MHz
Remote Distance	Up to15 Meters (Open Area)
Working Temperature	-30° to 80°
Rated Output Current	3 x 3.5A
PWM Frequency	1 KHz
IP Grade	IP-68 (Waterproof)



Parts Included

1 - LED Controller
1 - Wireless Remote

Wireless Remote

1. Turn On(|) / Standby(O)
Turns on controller or enters standby mode.

2. Ascend(+)/Descend(-) Dynamic Modes
Dynamic modes feature a variety of static color transitions and patterns, with 43 distinct modes. These buttons initiate Dynamic Mode and cycle through the modes in ascending(+) or descending(-) order.

3. Play (▶=) / Pause
Toggles between run/pause when in Dynamic Mode or Demo Mode. Initiates Dynamic Mode if Static Color Mode is currently active.

4. Increase(+)/Decrease(-) Tempo Speed Level
Increases(+) or decreases(-) the tempo of the currently active dynamic mode. Initiates Dynamic Mode if Static Color Mode is currently active.

5. Demo Mode
Initiates Demo Mode. Demo Mode cycles through 27 individual modes, repeating each 3 times.

6. Ascend(+)/Descend(-) Static Colors
These buttons initiate Static Color Mode and cycle through the colors in ascending(+) or descending(-) order.

7. Increase(+)/Decrease(-) Static Color Brightness Level
Increases(+) or decreases(-) the brightness of the currently active static color. Initiates Static Color Mode if Dynamic Mode is currently active.

8. Direct Color Select
Activates the static color indicated by the button color. These individual colors are also accessible through the Ascend(+)/Descend(-) Static Colors buttons.

9. Wireless Remote LED Indicator
Flashes blue when remote is operated to indicate that remote is functioning properly.

Remote Pairing Options

Pairing A New Remote: Up to 3 wireless remotes can be assigned to operate the LED controller. Additionally, each individual wireless remote can be assigned to an unlimited number of controllers. The following steps show how to assign a new remote to the LED Controller:

1. Disconnect the power to the LED controller, wait 5 seconds, and reconnect.
2. Within 5 seconds of reconnecting the LED Controller, press the “Mode(-)” and “Speed(-)” buttons simultaneously.
3. The LED indicator on the LED controller will flash white 3 times indicating the new wireless remote has been successfully assigned. This may be done for a total of 3 wireless remotes.

Pairing Any Remote: Up to 3 wireless remotes can be assigned to operate the LED controller. The following steps show how to assign a new remote to the LED Controller:

4. Disconnect the power to the LED controller, wait 5 seconds, and reconnect.
5. Within 5 seconds of reconnecting the LED Controller, press the “On(|)” and “Play/Pause (▶=)” buttons simultaneously.
6. The LED indicator on the LED controller will flash yellow 3 times indicating the LED controller will recognize any remote.

RGB LED Controller

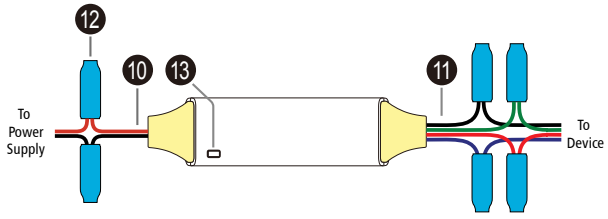
10. Power Supply Wiring
The controller/power supply operates on 5-24VDC. The red wire is positive(+) and the black wire is negative(-) as indicated on the controller housing.

11. LED Output Wiring
The controller supports common anode-type LED products. Output wires are indicated as follows:

Black(V+): Common node which connects as the positive (line) connection inside the controller.
Red(R): Wire connection for red LED color signals.
Green(G): Wire connection for green LED color signals.
Blue(B): Wire connection for blue LED color signals.

12. Wiring Connectors
Use wiring connectors to make connections between wiring. Be sure to maintain polarity and wiring color when connecting wiring. Dolphin connectors are shown here.

13. LED Controller Status Indicator
A multi-color emitting LED located on the remote controller indicates current operating status or operating status changes as follows:



RGB LED Controller Status Indicator							
Light Signal	Blue	Short single white flash	Long single white flash	Long single yellow flash	Blue flash	Red flash	Yellow flash
Indicates	normal functioning mode	lighting change	Range limit has been reached when cycling through Dynamic or Static color modes	Range limit has been reached when cycling through Tempo Speed Level or Static color Brightness Level	Dynamic mode is paused	Overload/short circuit has been detected, activating protection mode	Overheating has been detected, activating protection mode

Using the Wireless Remote

Prepare the wireless remote for use by removing the battery insulating tape. The remote uses a 3V CR2025 battery.
Note: The wireless remote operates using radio frequency. The remote controller’s use is not restricted by normal obstructions such as walls, doors, etc.

Additional Features

Waterproof LED Controller - The MCBRF-RGB10 LED controller is fully waterproof according to the IP68 standard and can be installed and operated underwater up to a depth of 30 meters. Note: LED controller sensitivity to wireless remote signals will decrease when operated in underwater conditions. Make sure to perform all wiring connections and setup prior to installing LED controller underwater.